Bits and Bytes

by Murrell Fitzgerald

The Staff of the D.C. Central Cancer Registry (DCCCR) attended the North American Association of Central Cancer Registries (NAACCR) Annual Meeting and Workshops which was held in Miami Beach, Florida from June 3rd thru 9th, 2001. The Registry was presented with their second Gold Certification, in as many years for the quality and timeliness in the reporting of their 1998 Data which was submitted for review by NAACCR.

A technology needs assessment of the programs within the BEHRA will be taking place in the near future.

Geneive Matanoski, M.D., Dr.Ph and Vincent Kofie PhD., C.P.M. accept Gold Certification for DCCR

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BEHRA

Bureau of Epidemiology and Health Risk Assessment

News For Your Health

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From the Director

The mission of the Department of Health is to ensure a safe and healthy environment for District of Columbia residents and visitors by working with all partners in strategic alliances. Primary to this mission is employing specific strategies to investigate potential threats and establish interventions when needed, and to foster and promote health education and disease prevention among District residents.

Ivan C. A. Walks, M.D.
Chief Health Officer
of the District of Columbia
Director, Department of Health

Senior Deputy Director for Primary Care, Prevention and Planning

Established within the Department of Health is the Office of Primary Care, Prevention and Planning. Formerly this office provided epidemiology expertise in a fragmented manner with each Bureau responsible for it's own limited epidemiology, surveillance and investigation activities. The Bureau of Epidemiology and Health Risk Assessment (BEHRA) was formed to develop a comprehensive and integrated approach to identifying findings significant to disease prevention and health management.

Michael Richardson, M.D.
Acting Senior Deputy Director
Office of Primary Care, Prevention and Planning

Inside this issue:

Biological and Chemical Terrorism

By Kimberley A. Turner

The Department of Health and primary health-care providers must be prepared to address varied biological agents, including pathogens that are rarely seen in the United States. Among bacteria, anthrax, cholera, plague and tularemia are possible candidates; and among viruses, smallpox, Ebola virus, and yellow fever. Toxins, such as botulinum toxin might also be considered. The ideal agent is one that spreads readily from person to person; is easily made, stored, and delivered; and poses no threat to those employing it because they have been vaccinated against it. Since there is no vaccine for the Ebola virus, anthrax and smallpox are strong candidates.

The Centers for Disease Control and Prevention warns that the public health response relative to bioterrorism will be most effective if the FBI coordinates the overall response by all sectors-pre-hospital and hospital care, law enforcement, public safety, etc.

Specifically, the FBI must be notified for:

a. one or more cases, definitively diagnosed with one or more of the following:
   i. Any case of smallpox or pulmonary anthrax (such a disease in even one case would strongly indicate the likelihood of Bioterrrorism).
   ii. Uncommon agent or disease (e.g., *Burkholderia mallei* or pseudomallei, smallpox, pulmonary anthrax) occurring in a person with no other explanation.
   iii. An illness caused by a microorganism with markedly atypical features (e.g., features suggesting that the microorganism was genetically altered)
   iv. An illness due to aerosol or food or water sabotage, as opposed to a usual transmission route.

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The Bureau of Epidemiology and Health Risk Assessment (BEHRA) supports the Mayor's initiative of building and sustaining healthy neighborhoods, and healthy families. This is accomplished through surveillance, investigation and tracking of health indicators, trends, and outbreaks of disease. Our surveillance data will serve as a basis for strategic planning to improve the health and quality of life for District residents.

BEHRA includes the District of Columbia Cancer Registry, Division of Disability Surveillance and Intervention, Division of Injury Surveillance and Prevention, Behavioral Risk Factor Surveillance System Program and the Division of Disease Surveillance and Investigation.

MISSION:

To assess health issues, risks and outcomes through data collection, surveillance, analysis and evaluation to prevent disease, injury and disability in the District of Columbia.

John O. Davies-Cole, Phd., M.P.H.
Bureau Chief
Epidemiology and Health Risk Assessment (BEHRA)

DIVISION OF INJURY SURVEILLANCE AND PREVENTION

The Division of Injury Surveillance and Prevention (DISP) identifies and monitors the incidence, prevalence and severity (mortality and morbidity) of injuries and implements preventive measures to reduce the physical, social, and other impacts of injuries in the District of Columbia. In addition, it is establishing an injury surveillance system for the District of Columbia. This system will enable the Department of Health to maintain an Injury Registry for the District of Columbia and analyze and report on the incidence and prevalence of injury in the District of Columbia.

DIVISION OF DISABILITY AND SURVEILLANCE AND INTERVENTION

The mission of the Division of Disability Surveillance and Intervention (DDSI) is to maintain surveillance of conditions that contribute to adverse health outcomes of persons with disabilities and employ intervention strategies to reduce the incidence and prevalence of secondary conditions and improve the quality of life of persons with disabilities in the District of Columbia.

DIVISION OF DISEASE SURVEILLANCE AND INVESTIGATION

The Division of Disease Surveillance and Investigation (DDSI) is responsible for the surveillance, investigation and control of reportable diseases within the District of Columbia, excluding sexually transmitted diseases, AIDS, and tuberculosis. The DDSI collects, analyzes, interprets and disseminates data to DOH programs and the community, and provides expertise and information on disease control. Data collected by Division Investigators are reported weekly to the Centers for Disease Control and Prevention (CDC) through the National Electronic Telecommunications System for Surveillance (NETSS). Case reports are received mainly from laboratories and infection control practitioners in hospitals. Cases are investigated and specimens collected for analysis and diagnosis. Epidemiological data are monitored routinely to detect changes and potential outbreaks. The Division is also responsible for bioterrorism epidemiology and surveillance activities, including syndrome-based surveillance.

DISTRICT OF COLUMBIA CANCER REGISTRY

The Cancer Registry is a mandated program (per DC Law 6-83, Preventive Health Services Amendments Act of 1985 and DC Law 8-57, Preventive Health Services Amendments Act of 1990) which requires the reporting of cancer diagnosis and/or treatment to the Director of DOH. The DC Cancer Registry has also become a part of the National Program of Cancer Registries (NPCR) which is governed by Federal Public Law 102-515. Since cancer is the second leading cause of death among District residents (22% of all deaths are due to cancer), the effectiveness of cancer control and prevention efforts related to breast, cervical and prostate cancer must employ reliable data-driven strategies to improve the health status of the residents of the District.

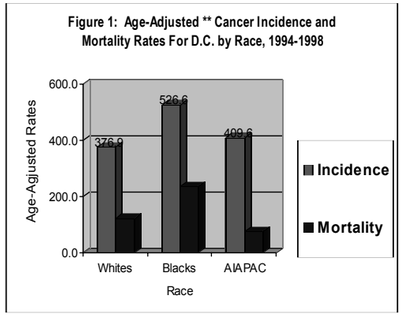
BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS)

The BRFSS is a state-based telephone survey conducted in cooperation with the U.S. Centers for Disease Control and Prevention (CDC) throughout the United States. It is a statistically sound survey that accurately portrays the health status of District of Columbia residents and is used by policy makers to plan and develop programs to address the health needs of District residents. It is administered to District of Columbia residents using a computer-assisted telephone interviewing (CATI) system. The BRFSS asks health related questions related to hypertension, physical inactivity, cholesterol levels, etc. Monthly residential telephone interviews are conducted on a regular basis. The interviewers complete an average of 200 telephone interviews each month for a minimum annual sample of 2,400. Approximately eighty (80%) percent of the interviews are conducted on weeknights and weekends with twenty (20%) percent conducted on weekdays.

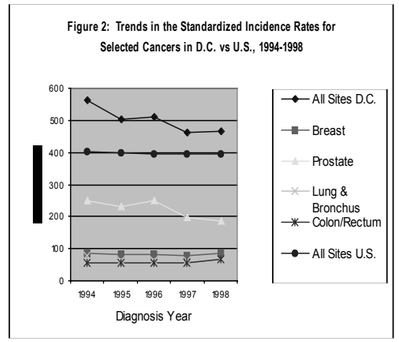
Cancer Incidence and Mortality in the District of Columbia

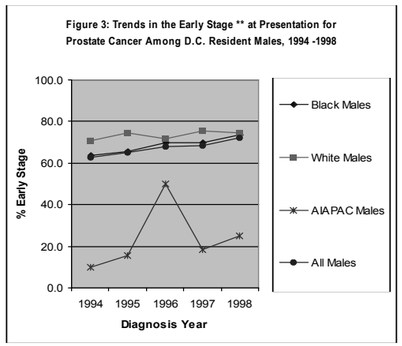
Vincent Kofie, Ph.D., C.P.M.

Striking differences exist in the relative rates of incidence and mortality for the three major ethnic categories of the District's population. For both incidence and mortality, Blacks experience the highest rates compared with Whites and American Indians, Asians and Pacific Islanders (AIAPAC). Whites generally experienced the lowest incidence rates compared with Blacks and AIAPAC residents.



On the other hand, AIAPAC residents of the District experienced the lowest rates of cancer mortality over the 1994-98 study period (See Figure 1). In the age-adjusted incidence of selected cancers among District residents over the period 1994-1998, trends in the total age-adjusted rates for all cancers combined for the District of Columbia and the U.S. were also compared. The data indicated that the District's total age-adjusted incidence rate declined from 564.1 per 100,000 in 1994, to 465.8 per 100,000 in 1998, implying an annual percentage change (APC) of 4.7 percent. For specific cancer sites in the District, the largest decline was observed for prostate cancer incidence that declined from 229.3 per 100,000 in 1994 to 185.2 per 100,000 in 1998. The trends over the recent past in the age-adjusted cancer incidence rates show the incidence is on the decline in the District, it also shows that they are 23.5% higher than the U.S. national rates (Figure 2).





In addition, Whites generally seek medical attention at an early stage as opposed to their African American, American Indian, and Asian/Pacific Islander (AIPAC) counterparts who seek care at a later stage. A similar trend is seen for the age adjusted mortality rates of cancer. A notable observation from the findings is the very low levels of prostate cancer stage at presenta- tion among Asian/Pacific Islander men in the District of Columbia compared to men of other ethnic origins. Between 1994-1998, the percent of AIPAC men presenting at the in-situ and localized stages of prostate cancer averaged 23.7, compared with 73.4% for White men, and 68.5% for African American men (See Figure 3).

The full report will be available on the DOH web site.

Meningococcal Disease

By Jennifer Capparella, MSPH

Meningococcal disease (Neisseria meningitides) is the leading cause of bacterial meningitis among children and young adults in the United States, resulting in an estimated 3,000 cases per year. Findings from a 1999 study (Rosenstein, Capparella, et al; 2001) revealed that incidence rates do not appear to be elevated in college students. When compared to other persons their age; however, freshmen that live in dormitories are at modestly increased risk for infection. Both the Advisory Committee on Immunization Practices (ACIP) and American Association of Pediatrics (AAP) used data from this study to provide information to college freshmen, especially those who live in dormitories, and their parents about the risk of the disease and the availability of a safe and effective vaccine.

(continued from page 1) Biological and Chemical Terrorism

b. one or more clusters of illnesses that remain unexplained after a preliminary investigation;
c. deliberate chemical, industrial, radiation or nuclear release.

The public health infrastructure must be prepared to prevent illness and injury that would result from biological and chemical terrorism. As with emerging infectious diseases, early detection and stabilizing biological and chemical attacks is the responsibility of the public health system. In addition, primary health-care providers must be heedful as it is likely they will be the first to observe and report unusual illness or injuries.

Sources: Centers for Disease Control and Prevention
Morbidity and Mortality Weekly Report,
April 21, 2000 / 49(RR04); 1-14.